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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,024	02/18/2005	Daisuke Yamada	266374US2PCT	3135
22850	7590	12/06/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BENSON, WALTER	
			ART UNIT	PAPER NUMBER
			2858	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/525,024	Applicant(s) YAMADA ET AL.	
	Examiner Walter Benson	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/18/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

1. Claims 1-6 are presented for examination.

#### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to *a single paragraph on a separate sheet within the range of 50 to 150 words*. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

#### ***Claim Objections***

1. Claims 1 and 3 are objected to because of the following informalities:
  - i. Usually the structure of a claim will contain:
    - a. Preamble section
    - b. Body section
    - c. Transitional section.

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Claims 1 and 3, contains too many transitional words, it is unclear what is the preamble and the body of the claim.

Appropriate correction is required.

2. Claim 6 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubo (US Patent No. 6,663, 799 B2 and Kokubo hereinafter) in view of Kimura et al. (US Patent No. 6,720,787 B2 and Kimura hereinafter) and further in view of Stierman et al. (US Patent No. 6,798,212 B2 and Stierman hereinafter).
5. As to claims 1-4, Kokubo discloses an anisotropically conductive sheet substantially as claimed formed by containing conductive particles exhibiting magnetism in a sheet base

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composed of an elastic polymeric substance in a state dispersed in a plane direction and oriented so as to align in a thickness-wise direction [claims 1, 3] (col. 13, lines 10-20);

where a thickness of the sheet is to 100  $\mu\text{m}$  [col. 13, lines 51-53], a number average particle diameter of the conductive particles exhibiting magnetism is 5 to 50  $\mu\text{m}$  [claims 1, 3] (col. 13, lines 61-63);

where a conductive substance exhibiting no magnetism is contained in a uniformly dispersed state [claims 2, 4] (col. 16, lines 23-26).

Kokubo did not expressly disclose:

a ratio  $W1/D$  of the thickness  $W1$  to the number average particle diameter  $D$  of the conductive particles exhibiting magnetism is to 10 [claims 1, 3];

a content of the conductive particles exhibiting magnetism 40% in terms of a weight fraction [claims 1, 3].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Kokubo, as evidenced by Kimura.

Kimura discloses an anisotropically conductive sheet having:

a ratio  $W1/D$  of the thickness  $W1$  to the number average particle diameter  $D$  of the conductive particles exhibiting magnetism is to 10 [claims 1, 3] (col. 9, lines 66-67 and col. 10, lines 1-3);

a content of the conductive particles exhibiting magnetism 40% in terms of a weight fraction [claims 1,3](col. 9, lines 50-53).

Given the teaching of Kimura, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Kokubo

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by employing the well known or conventional features of conductive composite particle sheet production and applied products, such as disclosed by Kimura in order to efficiently inspect circuit board and devices.

further as to claims 1, 3, and 5, Kokubo and Kimura did not expressly:

the sheet used for impedance measurement in a high frequency region [claim 1, 3];

where the conductive part, which is connected to a circuit to be measured of a board to be measured, and the conductive part, which is connected to a ground circuit of the board to be measured, in an impedance-measuring probe are separated from each other by the insulating part [claim 5].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Kokubo in view of Kimura as evidenced by Stierman.

Stierman discloses a probe that includes a conductive sheet having:

the sheet is used for impedance measurement in a high-frequency region [claims 1, 3] (col. 5, lines 14-17);

where the conductive part, which is connected to a circuit to be measured of a board to be measured, and the conductive part, which is connected to a ground circuit of the board to be measured, in an impedance-measuring probe are separated from each other by the insulating part [claim 5] (Fig. 1; col. 4, lines 29-40).

Given the teaching of Stierman, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Kokubo in view of Kimura by employing the well known or conventional features of a uniform ground

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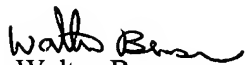
plane, such as disclosed by Stierman in order to efficiently inspect and test for circuit faults in circuit board and devices.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (571) 272-2227. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Walter Benson  
Patent Examiner

December 3, 2005